

IV. REMARKS

1. Claims 1, 12, 13, 15, 20, and 42 remain in the application. Claims 21-41 have been withdrawn, claims 2-11, 14, 16-19, and 43-50 have been cancelled, and claims 51-108 have been added. Claims 1, 12, 13, 15, 20, and 42 have been amended.
2. The specification has been amended to add headings in compliance with US practice and to correct a typographical error.
3. The Abstract of the Disclosure has been amended to comply with MPEP 608.01(b).
4. The specification has been amended on page 1 to eliminate a reference to Figure 1a. As stated in the Brief Description of the drawings, on page 9, lines 1-2, Figure 1 shows a system in which the method according the invention can be applied. Thus, Figure 1 is not to be considered prior art. Applicants respectfully submit that this amendment overcomes any requirement for a drawing amendment.
5. Applicants respectfully submit that claims 1, 12, 13, 15, and 42 are not anticipated by Blakeney et al. (US 5,638,412, hereinafter "Blakeney").

Blakeney fails to disclose or suggest that gathering a set of requirements for a bearer service is performed by an application execution environment in a mobile terminal, as recited by claims 1 and 42.

It is an object of the system disclosed in Blakeney to provide a method and apparatus for negotiating a service configuration in a wireless communication system (column 2, lines 8 to 10), which reduces the amount of data relating to call set-up and service negotiation transmitted over the common (paging and access)

channels of the wireless communication system (column 2, lines 29 to 35).

Accordingly, it is suggested that if an initial service configuration suggested either by a mobile station or by the wireless communication network is not immediately acceptable to the other party of the intended communication, further negotiation in order to establish a mutually acceptable service configuration is continued over a traffic channel instead of the common paging and access channels (see column 6, line 48 to column 7, line 18 and column 7, line 55 to column 8, line 11).

In the case of a call set-up procedure initiated by the mobile station (mobile originated call), the mobile communication network, in particular, a base station of the network, is the other party involved in the negotiation process. Conversely, in a call set-up procedure initiated by the communication network (mobile terminated call), the mobile station is the other party. According to Blakeney the traffic burden placed on the common channels is reduced compared with prior art systems.

In an alternative embodiment of Blakeney, the party that initiates the call set-up procedure may simply indicate its desire to establish a call using the appropriate common channel, and all further negotiation takes place over a traffic channel allocated for the purpose (see column 2, lines 36 to 44).

It should be apparent that Blakeney is directed towards negotiating / renegotiating a communication service. Unlike the present invention, Blakeney does not address the issue of how the requirements for a communication service are gathered. Although the text between lines 53 and 63 in column 1 of Blakeney does acknowledge that different communication devices are likely to have different capabilities, it is simply stated that this is likely to give rise to a greater need for service negotiation

between devices attempting to communicate in a wireless communication system.

In their newly amended form, the claims of the instant application define the way in which the aforementioned problem, identified in Blakeney, can be solved. More specifically, according to the present invention, a solution to this problem is provided by enabling an application execution environment in a mobile terminal to gather information about a required bearer service from an application to be started (i.e. executed).

Because Blakeney provides only a statement of a problem still to be solved and does not even mention an application execution environment such as that considered in the present application it cannot, by definition, provide any teaching or suggestion that would directly anticipate or render obvious the inventive concept claimed by the present application.

At least for these reasons, Applicants respectfully submit that Blakeney does not anticipate independent claims 1 and 42 and dependent claims 12, 13, and 15.

6. Applicants respectfully submit that claim 20 is patentable over the combination of Blakeney and Rasanen (WO 97/12490).

Claim 20 depends from claim 1. As argued above, Blakeney fails to disclose or suggest that gathering a set of requirements for a bearer service is performed by an application execution environment in a mobile terminal. Rasanen also fails to disclose or suggest this feature.

Rasanen presents a method for establishing a data call and a mobile communication network. In particular, Rasanen addresses the problem of how to reduce / limit the number of independent bearer services specified in a mobile communication network.

Rasanen describes the state of the art as of its filing date as comprising mobile communication networks in which each data rate available for communication within the mobile communication network was identified as a separate bearer service (see abstract and page 2, lines 4 to 6, for example). When the number of services offered by such a network increases, this gives rise to a corresponding proliferation in bearer services which, in turn, leads to technical problems for mobile subscribers and for mobile service providers.

For example, in order for a mobile subscriber to carry out data calls having different data rates, the subscriber is required to have a subscription to a separate bearer service for each data rate (see page 3, lines 17 to 20). The bearer service required must then be indicated when setting up a call (see page 2, lines 20 to 24).

In communications between mobile stations in a digital mobile communication network, such as a GSM telephone system, or between a mobile station in a digital mobile communication system and a terminal in another digital network, such as an ISDN network, signalling of a required bearer service can be accomplished by means of a special Bearer Capability Information Element (BCIE) included in the call set-up signalling (see page 2, lines 20 to 28). However, this approach cannot be used if the call originates from, or is routed via, the Public Switched Telephone Network (PSTN), as information on the bearer service required is not transmitted to the mobile communication network (see page 2, lines 28 to 34).

To overcome this problem, prior art systems use a multi-numbering scheme for mobile terminated calls, in which a mobile subscriber has a separate directory number for each of the various bearer services to which he / she subscribes (see page 2, line 34 to page 3, line 6). However, this introduces a further problem for

mobile service providers, namely the network resources required to store information on the correspondence between subscribers' multiple directory numbers and the bearer services they are entitled to use. The multiple numbering scheme also wastes the number space of the mobile communication network (see page 3, lines 6 to 25).

In order to overcome the problems of prior art systems described above, Rasanen introduces a mobile communication network in which one bearer service encompasses a number of data rates (see page 3, line 35 to page 4, line 3). More specifically, instead of specifying a particular data rate, the bearer services envisioned by Rasanen include a particular type or category of bearer service. For example, a single asynchronous bearer service is proposed. This bearer service is specified initially when establishing an asynchronous data call having any data rate (see page 6, line 31 to page 7, line 2). Thereafter negotiation takes place between the mobile communication network and the mobile station in order to determine a data rate for the call in question (see page 5, lines 10 to 26).

If a fixed line network, such as an ISDN network or a PSTN network is also involved in the call, a further negotiation is performed. This is necessary, for example, in a situation where the intended recipient of a data call originated by a mobile station is a terminal in the PSTN. In this situation, once a data rate has been negotiated between the originating mobile station and the mobile communication network, handshaking takes place between modems in the mobile communications network and the fixed line terminating network (see page 5, line 27 to page 6, line 6). As a result of this second negotiation, the data rate originally agreed between the originating mobile station and the mobile communication network may either be accepted for communication

with the fixed line network, or may be lowered if the fixed line network cannot operate at the data rate originally suggested.

This adaptation of the data rate between the fixed line terminating network and the mobile communication network represents the third stage of the call set-up procedure according to Rasanen (see page 6, lines 12 to 29).

It should be appreciated that Rasanen concentrates exclusively on the way in which a data rate to be used in communication is negotiated between a mobile station and a mobile communication network, taking into account possible limitations imposed by a fixed line terminating network. Rasanen does not address the issue of how a desired data rate is defined / selected.

As discussed at length in the present application, the mobile station, application and user may have a number of different requirements (in addition to data rate), which should be taken into consideration when selecting a bearer service for communication. Some of these requirements may even be contradictory. Rasanen is completely silent about the way in which different requirements for a bearer service may be taken into account and how an appropriate choice of bearer service can be made. The present invention, on the other hand, provides a means by which such a choice of bearer service can be made. More specifically, the newly amended independent claims focus on the gathering of requirements for, and selection of, an appropriate bearer service for use by an application to be executed in a mobile terminal, by means an application execution environment provided in the mobile terminal.

At least for these reasons, Applicants submit that the inventive method disclosed in the present application and expressed in amended claim 1 is neither disclosed nor suggested by Blakeney or Rasanen, neither alone nor in combination. Therefore,

independent claim 1 and dependent claim 20 are patentable over the combination of Blakeney and Rasanen.

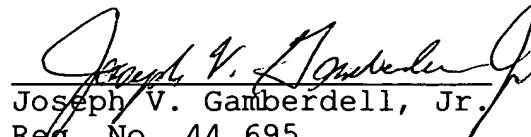
7. Claims 51-108 are new and depend from claims 1 or 42. Therefore claims 51-108 are also patentable over the cited art.

For all of the foregoing reasons, it is respectfully submitted that all of the claims now present in the application are clearly novel and patentable over the prior art of record, and are in proper form for allowance. Accordingly, favorable reconsideration and allowance is respectfully requested. Should any unresolved issues remain, the Examiner is invited to call Applicants' attorney at the telephone number indicated below.

A check in the amount of \$1202.00 is enclosed for a three month extension of time (\$950.00) and on account of the additional claim fees (\$252.00).

The Commissioner is hereby authorized to charge payment for any fees associated with this communication or credit any over payment to Deposit Account No. 16-1350.

Respectfully submitted,


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